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10/608,243	06/27/2003	Stephen J. Kelly	480062.732	8580

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EXAMINER

KROFCHECK, MICHAEL C

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,243

Applicant(s)

KELLY ET AL.

Examiner

Michael Krofcheck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 and 7-20 is/are allowed.
- 6) ☒ Claim(s) 5, 6, 21, 22, 24, 26 and 29-38 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 23, 25, 27 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the amendment filed on 2/28/2006.
2. The specification and claims 1-6, 15, 18-19, 21 and 27-31 have been amended.
3. Claims 32-38 have been added.
4. The objections/rejections from the prior correspondence not restated herein have been withdrawn.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 5-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. The term "frequently accessed" in claims 5 and 6 is a relative term which renders the claim indefinite. The term "frequently accessed" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

While the amendment removes the instance in the preamble of each claim, "frequently accessed" is still used twice in claim 5 and 3 times in claim 6. The mere fact that "frequently accessed" is preceded by the words "more" or "less" does not make it

any less indefinite. If anything it becomes even more undefined as there is nothing in the identified claims which states what "more" or "less" is.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 21-22, 24, 26, 29, and 31 is rejected under 35 U.S.C. 102(e) as being anticipated by Kung et al., U.S. Patent Application No. 2004/0078514 (hereinafter Kung).

10. With respect to claim 21, Kung teaches of an apparatus for use with a device, the apparatus comprising: at least one solid-state memory (figs. 1 – 3; item 5; paragraphs 0017, 0018);

at least one spinning media memory (fig. 2; item 13; paragraph 0021); and

a controller configured to transfer data between the spinning media memory and the solid-state memory when the device is not in motion (figs. 1, 2; items 22, 23, 11; paragraphs 0018, 0023 – 0028; where the microcontroller detects the insertion of the flash memory (device) or the USB HID is used if the reader is made a composite USB device (device); therefore it is not in motion. The microcontroller is controlled by the

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firmware. Upon insertion, the copying of files to the hard drive is undertaken by the device driver, the firmware controlling access in the memory), and

to not transfer data between the spinning media memory and the solid-state memory when the device is in motion (paragraph 0028; the files are copied upon the insertion of the card. When the card is not inserted, it is not fixed in the card connector and is in motion, such as it is in the process of being inserted, or the user is carrying it around in their pocket in route to the reader. As it is not connected to the reader, the files cannot be copied).

11. With respect to claim 22, Kung teaches of all the limitations of the parent claim as discussed supra. Kung also teaches of a motion sensor coupled to provide motion information to the controller from which the controller can determine whether the device is in motion (paragraph 0023 – 0026, 0028; the microcontroller is able to detect the insertion of the flash memory card (device). Since the flash memory card is inserted into the reader it cannot be in motion. The device driver is notified upon insertion of the card to allow the file copying to commence).

12. With respect to claim 24, Kung teaches of all the limitations of the parent claim as discussed supra. Kung also teaches of wherein the device is a vehicle (paragraph 0024; where the reader is a composite USB device).

13. With respect to claim 26, Kung teaches of all the limitations of the parent claim as discussed supra. Kung also teaches of wherein the device is a vehicle (paragraph 0024; where the reader is a composite USB device) and

the apparatus is part of an automatic data collection unit carried by the vehicle (figs. 1, 2; paragraph 0017 – 0018, 0022 – 0028; where the flash memory card, and the firmware and microcontroller (the controller; both part of the apparatus) are contained in the composite USB device. When inserted, the files on the flash memory are automatically copied to the hard drive. Therefore it is an automatic data collection unit).

14. With respect to claim 29, Kung teaches of all the limitations of the parent claim as discussed supra. Kung also teaches of wherein device is a general purpose computing system including a microprocessor (figs. 1, 2; items 22; paragraph 0024, 0017; wherein the flash memory card and the card reader comprise a composite USB device. The card reader contains a microcontroller), and

the apparatus is coupled to the microprocessor via a bus interface (Figs. 1, 2; paragraph 0017; the flash memory is connected to the microcontroller, and through the USB bus and interface the microcontroller is connected to the host and the hard drive).

15.

16. With respect to claim 31, Kung teaches of an apparatus for use with a device, the apparatus comprising: at least one spinning media memory for storing data (fig. 2; item 13; paragraph 0021);

at least one solid-state memory (figs. 1 – 3; item 5; paragraphs 0017, 0018);

means for determining, from time-to-time, whether the device is in motion (figs. 1, 2; items 22, 23, 11; paragraphs 0018, 0023 – 0028; where the microcontroller detects the insertion of the flash memory or the USB HID is used if the reader is made a composite USB device; therefore it is not in motion); and

means responsive to a determination that the device is not in motion (figs. 1, 2; items 22, 23, 11; paragraphs 0018, 0023 – 0028; where the microcontroller detects the insertion of the flash memory or the USB HID is used if the reader is made a composite USB device; therefore it is not in motion),

means for transferring data between the spinning media memory and the solid-state memory when the device is determined not to be in motion (figs. 1, 2; items 22, 23, 11; paragraphs 0018, 0023 – 0028; where the microcontroller detects the insertion of the flash memory or the USB HID is used if the reader is made a composite USB device; therefore it is not in motion. Upon insertion the copying of files to the hard drive is undertaken by the device driver across the bus).

17. Claims 32 rejected under 35 U.S.C. 102(e) as being anticipated by Edgerton et al., U.S. Patent 5835298.

18. With respect to claim 32, Edgerton teaches of a system comprising a vehicle (fig. 1; item 10; column 4, lines 15-20); and

an electronic system configured to be carried by the vehicle, the electronic system including a solid-state memory (fig. 2; items 50, 64, 66; column 5, lines 11-15; column 6, lines 8-10, lines 29-33),

a spinning media memory (fig. 2; item 13; column 4, lines 18-21),

a motion sensor configured to detect motion of the vehicle and generate motion information (fig. 2; item 62; column 5, lines 45-65), and

a controller configured to receive the motion information and transfer data between the spinning media memory and the solid-state memory based upon the

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motion information (fig. 2; items 44, 60; column 5, lines 7-15, 23-26, 56-58; column 6, lines 20-27, 48-51; both processors comprise the controller. As when the device is in free fall or rapid motion, a lack of hard drive function happens since it is in a protective state. Thus the transfer of data to the hard drive is restricted. As the memory, 50, temporarily stores information received and the hard drive stores data collected by the terminal, it is clear that the data is transferred from the memory, 50, to the hard drive during proper operation).

19. With respect to claim 33, Edgerton teaches of wherein the controller transfers data between the spinning media memory and the solid-state memory when the vehicle is not in motion (fig. 2; column 5, lines 7-15, 23-26, 56-58; column 6, lines 20-27, 48-51; As the memory, 50, temporarily stores information received and the hard drive stores data collected by the terminal, it is clear that the data is transferred from the memory, 50, to the hard drive during proper operation (when the device is not falling-in motion)).

20. With respect to claim 34, Edgerton teaches of wherein the electronic system further comprises: a bus configured to couple the solid-state memory, the spinning media memory, the motion sensor, and the controller (fig. 2, item 63; column 5, lines 54-57; where the bus 63 couples the accelerometer to the two processors (controller) which are in turn connected to the hard drive, and memory);

a processing unit coupled to the bus (fig. 2; item 60 and 44; where bus 63 is connected to the processor, 60, which is connected to processor 44); and

a system memory coupled to the bus (fig. 2; item 50; column 5, lines 7-15; where the memory is connected to the bus 63 via the two processors).

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21. With respect to claim 35, Edgerton teaches of where the electronic system further comprises: a reader coupled to the bus (fig. 2; item 22; column 4, lines 40-46; where a barcode reader is connected to bus 63 via the two processors (controller)); and

a decoder coupled to the bus (fig. 2; item 40; column 54-58; as the transceiver sends and receives signals over an antennae, it must contain a decoder to decode the received signals).

22. With respect to claim 36, Edgerton teaches of the limitations cited above with respect to claims 32 and 33.

23. With respect to claims 37 and 38, Edgerton teaches of the limitations as cited with respect to claims 34 and 35 respectively.

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

26. Claim 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Kung and Stobbs et al. U.S. Patent Application Publication No. 2004/0039871 (hereinafter Stobbs).

27. With respect to claim 30, Kung teaches of all the limitations of the parent claim as discussed supra. Kung also teaches of wherein device is a general purpose computing system including a microprocessor. (Figs. 1, 2; items 22, 5; paragraph 0024, 0017; wherein the flash memory card and the card reader comprise a composite USB device. The card reader contains a microcontroller, and the flash memory), and

the controller of the apparatus is implemented in the microprocessor of the general-purpose computer (figs. 1, 2; items 22, 23; paragraph 0017, 0018; where the firmware (controller) is within the microprocessor) and

Kung fails to specifically teach of (1) a random access memory and (2) the solid-state memory is implemented in a random access memory of the general purpose computer.

However, Stobbs teaches of a random access memory (fig. 3, item 102; paragraph 0033),

the solid-state memory is implemented in a random access memory of the general purpose computer (figs. 1 – 3, items 100, 102; paragraph 0031 – 0033; where the MRAM (solid-state memory) replaces the flash memory in the computer).

Kung and Stobbs are analogous arts as they are both in the same field of endeavor, memory devices. It would have been obvious to one of ordinary skill in the

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art having the teachings of Kung and Stobbs at the time of the invention to replace the flash memory in Kung with a MRAM as taught in Stobbs. The motivation for this would have been to provide the access speed of RAM with the non-volatility of ROM and to extend the life of the memory (Stobbs paragraph 0008 and 0009).

Allowable Subject Matter

28. Claims 1-4 and 7-20 are allowed.

29. Claims 23, 25, 27, and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

30. Claims 5 and 6 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

31. The statement for the reasons for allowance has been made in the prior correspondence.

Response to Arguments

32. Applicant's arguments filed 2/28/2006 have been fully considered but they are not persuasive.

33. The applicant argues that the device is not defined as the controller or either memory type, and thus cannot be interpreted as such. As in claim 21, there are no limitations as to what the device can or cannot be. The limitation of, "an apparatus for use *with* a device," is so broad that it is essentially non-limiting. Any two computer

related items can be considered an apparatus (such as a computer) and device (such as any component of that computer). "for use with" does not exclude the device from being an item that is part of the apparatus, for surely part of a whole is used with the whole.

34. The applicant also argues that Kung does not disclose a system or method of copying files when a device or component of the system is not in motion. Fig. 1 and 3 show the flash memory card inserted in the reader. When inserted, the card is fixed to the reader and cannot be moved with respect to the reader (except for removing the card, which would break the connections, promptly ceasing to transfer the files).

Motion is defined as, "the act or process of changing position or place." Positions are relative. In other words, the position of an object is defined by its relationship to other objects, whether they are physical objects, or numbers on a grid. The claim does not specify what the device is in motion with respect to. One can argue that a tape in a car tape player is moving when the car is moving, but that tape is also stationary because it is in the exact same place in space within the car, being fixed inside the tape player. The extreme can also be said, that nothing is "not in motion" since the earth is constantly moving.

Paragraph 10 of Kung states that "an automatically initiated task (upon media insertion) just requires a device driver that launches the application upon media detection." That media detection occurs upon media insertion and the insertion of the flash card in the card connector (fig. 4), fixes the flash card with the reader. Thus the

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lack of motion of the flash card with respect to the reader guaranteed until the flash card is removed.

35. The applicant also argues with respect to claim 22, that Kung does not teach of a motion sensor that provides motion information to the controller. The examiner directs the applicant to paragraph 27 above. Fig. 1 shows a card connector (item 24). This card connector holds the flash memory card and electrically connects it the CPU. Paragraph 23 states that the CPU can detect the insertion of the flash memory card. This must be done through the card connector (acts as the motion detector). This detection identifies that the flash card is in the card connector, thus it is not in motion, and the detection of it is the motion information because it indicates the flash card is there fixed to the reader to be accessed by the reader.

Conclusion

36. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

37. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Krofcheck whose telephone number is 571-272-8193. The examiner can normally be reached on Monday - Friday.

39. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

40. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Krofcheck



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